

DESCRIPTION:

THE MODEL TD-23T-SS-218 THRESHOLD DETECTOR OPERATES OVER THE FREQUENCY RANGE OF 2 TO 18 GHz, HAS VSWR OF 2.5:1, OPERATING RANGE OF -18 TO -23 dBm, THRESHOLD LEVEL OF -23 dBm, THRESHOLD SETTING STABILITY OF ± 3 dB, MAXIMUM INPUT POWER OF +10 dB AND RESPONSE TIME OF 100 μ s.

SPECIFICATIONS:

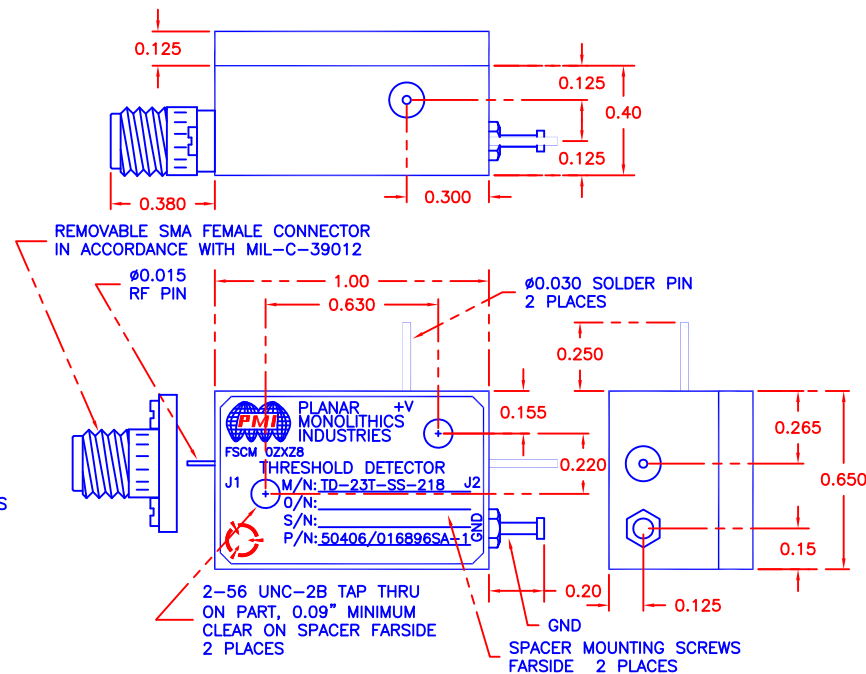
- OPERATING FREQUENCY: 2 GHz TO 18 GHz
(OTHER FREQUENCY RANGES AVAILABLE)
- INPUT OPERATING RANGE: -18 dBm TO -23 dBm (2-18 GHz)
- INPUT VSWR: 2.5:1 (2-18 GHz)
- THRESHOLD LEVEL: INTERNALLY FIXED TO PROVIDE A
MINIMUM SIGNAL LEVEL OF -23 dBm
- THRESHOLD SETTING STABILITY: ± 3.0 dB OVER THE OPERATING TEMPERATURE
AND FREQUENCY RANGE
- MAXIMUM POWER INPUT: +10 dBm (WITHOUT DAMAGE)
- DETECTED OUTPUT: THE DETECTED OUTPUT SIGNAL SHALL BE A TTL LEVEL HIGH
WHEN THE RF SIGNAL APPLIED TO THE RF INPUT EXCEEDS
THE THRESHOLD LEVEL. ANY SIGNALS BELOW THE THRESHOLD
LEVEL SHALL RESULT IN AN OUTPUT LEVEL OF TTL LOW (0)
THE TTL OUTPUT SHALL BE BUFFERED IN SUCH THAT OUTPUT
LOADING HAS NO EFFECT ON DETECTOR RESPONSE. THE DETECTED
OUTPUT SHALL HAVE A DRIVE CAPACITY OF AT LEAST TWO
STANDARD TTL LOADS.
- RESPONSE TIME: FOR ANY RF INPUT GREATER THAN 3 dB ABOVE THRESHOLD, THE
MAXIMUM TURN ON RESPONSE TIME MEASURED AT 90% RF TO A
TTL "1" OUTPUT SHALL BE 100 μ s. THE MAXIMUM TURN OFF
RESPONSE TIME MEASURED AT 10% RF TO A TTL "0" SHALL BE
100 μ s. (UNITS WITH HIGHER SPEED OF 10nS, 25nS, 50nS, 100nS
ALSO AVAILABLE AS OPTIONS HS10, HS25, HS50, AND HS100)
- POWER SUPPLY VOLTAGE: +12V @ 50 mA MAX.
- SIZE: 1.00" (L) x 0.65" (W) x 0.40" (H)
- WEIGHT: 2.0 oz.

ENVIRONMENTAL RATINGS:

- TEMPERATURE: -20°C TO +85°C (OPERATING)
-62°C TO +85°C (STORAGE)
 - HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
 - SHOCK: MIL-STD-202F, METHOD 213B COND. B
 - VIBRATION: MIL-STD-202F, METHOD 204D COND. B
 - ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
 - TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A
- NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ± 0.020
X.XXX ± 0.010

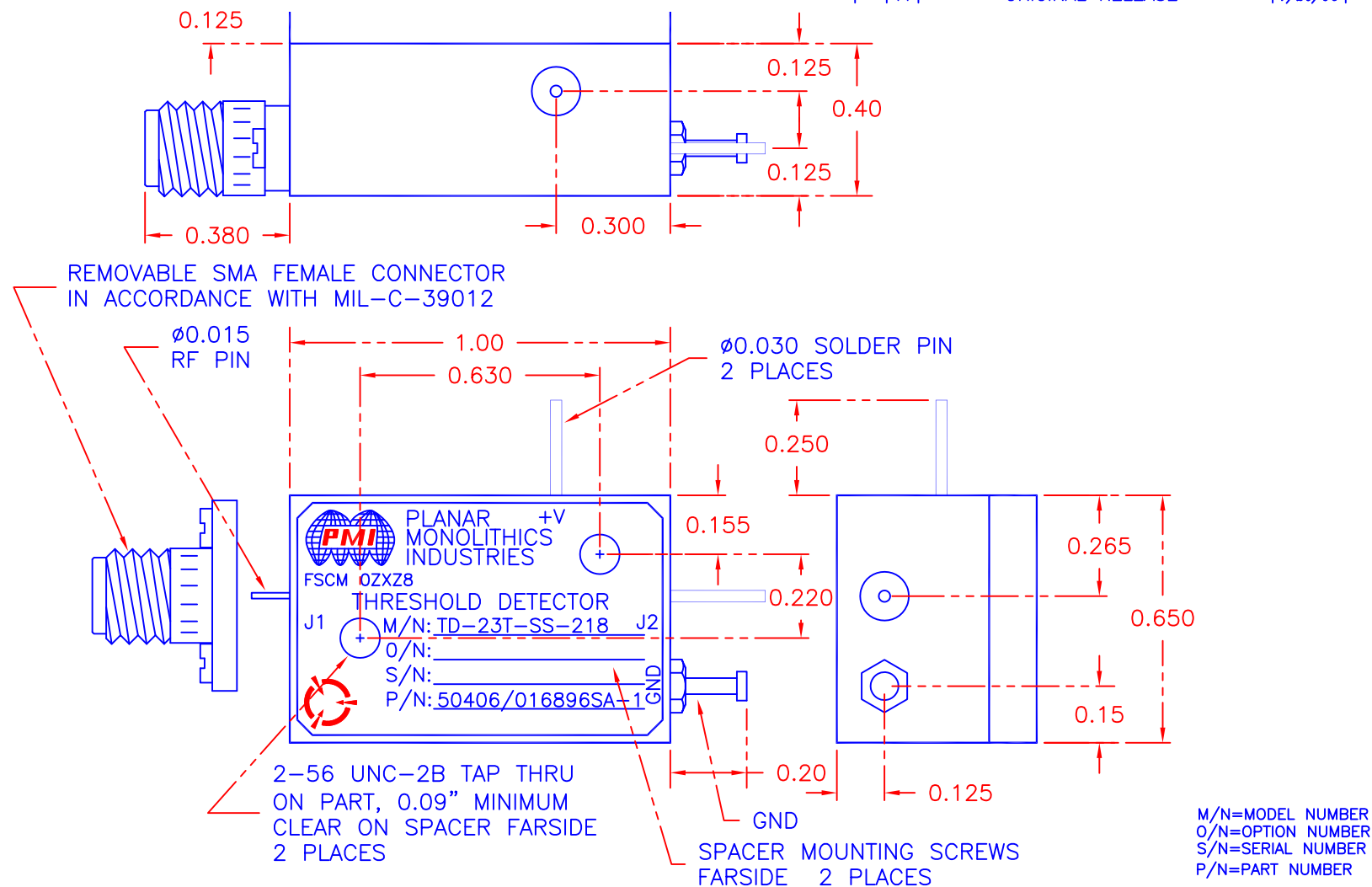
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	7/25/08	



M/N=MODEL NUMBER
O/N=OPTION NUMBER
S/N=SERIAL NUMBER
P/N=PART NUMBER

PART NO.		PLANAR MONOLITHICS INDUSTRIES 7311-F GROVE RD FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	
DRAWN <i>PMS</i>	7/25/08	PRODUCT FEATURE TD-23T-SS-218 THRESHOLD DETECTOR	
CHECKED			
ISSUED			
		SIZE A	FSCM NO. 60483
		DWG NO. 27008994	
		REV. A	
		SCALE N/S	SHEET 1 of 3

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	7/25/08	

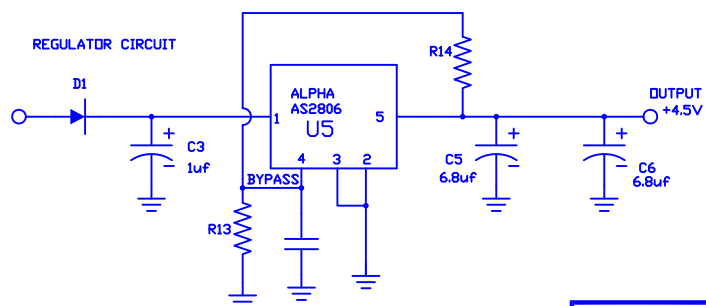
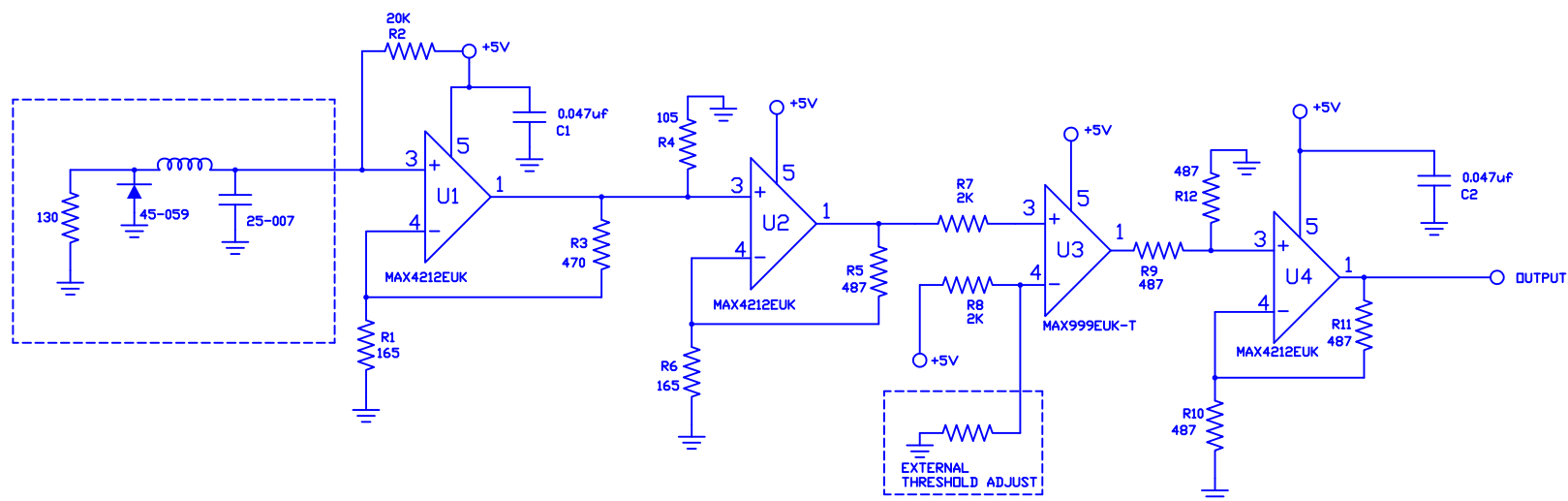


ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

PART NO.		PLANAR MONOLITHICS INDUSTRIES 7311-F GROVE RD FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	
DRAWN <i>PMI</i>	7/25/08	OUTLINE DRAWING TD-23T-SS-218 THRESHOLD DETECTOR	
CHECKED			
ISSUED		SIZE	REV.
		A 60483	A
		FSCM NO. 27008994	
		SCALE N/S	SHEET 2 of 3

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE	7/25/08	

FUNCTIONAL SCHEMATIC



PART NO.		 PLANAR MONOLITHICS INDUSTRIES 7311-F GROVE RD FREDERICK, MARYLAND		
APPROVALS	DATE	TITLE		
DRAWN <i>PMI</i>	7/25/08	SCHEMATIC TD-23T-SS-218 THRESHOLD DETECTOR		
CHECKED		SIZE	FSCM NO.	REV.
ISSUED		A	60483	A
		DWG NO.	27008994	
		SCALE	N/S	SHEET 3 of 3